A NEW PALMACORIXA FROM WESTERN CANADA

(HEMIPTERA, CORIXIDAE)[1]

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The genus *Palmacorixa* Abbott contains three described North American species distributed chiefly in Eastern Canada and United States (Hungerford, 1948). None has heretofore been recorded from Western Canada.

During the regular insect faunal survey in 1958 two species of *Palmacorixa* were collected in Saskatchewan and Manitoba. One of these proved to be an undescribed, lake-dwelling species. The other species, *P. gillettei* Abbott, was found rather abundant in Saskatchewan in a weedy pool of the Pipestone Creek south of Whitewood; and in Manitoba in the La Salle river at St. Norbert, in the Assiniboine river north of Holland, and in Lake Manitoba east of Langruth.

The new species is named for my daughter Jane, who was responsible for collecting the original series.

Palmacorixa janeae, n. sp.

(Figs. 1, 2, 3, 4)

Size.—Length 4.5 to 5.5 mm.; width of head 1.2 to 1.4 mm.

Color.—General appearance pale, with paler area on clavus just behind scutellum. Vertex and face pale, translucent yellow, the vertex usually with faint, brown, median line. Pronotum crossed by about eight, narrow, more or less split, brown bands. Hemelytral pattern reticulate, quite variable, the brown lines usually narrow and scattered, and the inner basal area of clavus with reduced markings; brown lines usually somewhat heavier and partly fused each side of claval suture, and immediately behind claval suture-commissure junction; pattern of membrane continuous with corium; underside and legs entirely pale.

Structural characteristics (male).—Frontal depression very shallow and oval, the upper margin extending just above the lower border of eye; a slight depression beneath inner corner of eye. Synthlipsis 0.8 times as wide as eye at posterior margin. Pronotum 2.15 times as wide as long, its surface sparsely punctate. Hemelytral surface rugulose with sparse hairs. Mesoepimeron a little narrower than lateral lobe of prothorax, the osteole just laterad of the tip. Metaxyphus short, flat, and triangular, one-third wider than long, and the apex about 80 degrees. Front femur with large, circular, stridular field of pegs (12-13 rows); pala a thin, triangular plate with upper margin nearly straight, the outer third covered with appressed, white, spine-like hairs with some stouter peg-like hairs forming a triangular patch at the centre toward base, and a short, curved row of pegs at base below; lower palmar bristles 12; middle femur without a row of pegs on ventral surface; upper surface of hind femur (posterior) with long row of pegs, the lower surface bare. Hemelytron pointed at apex; hind wing reduced to very small, short membrane. Fourth abdominal tergite with large, hair-margined

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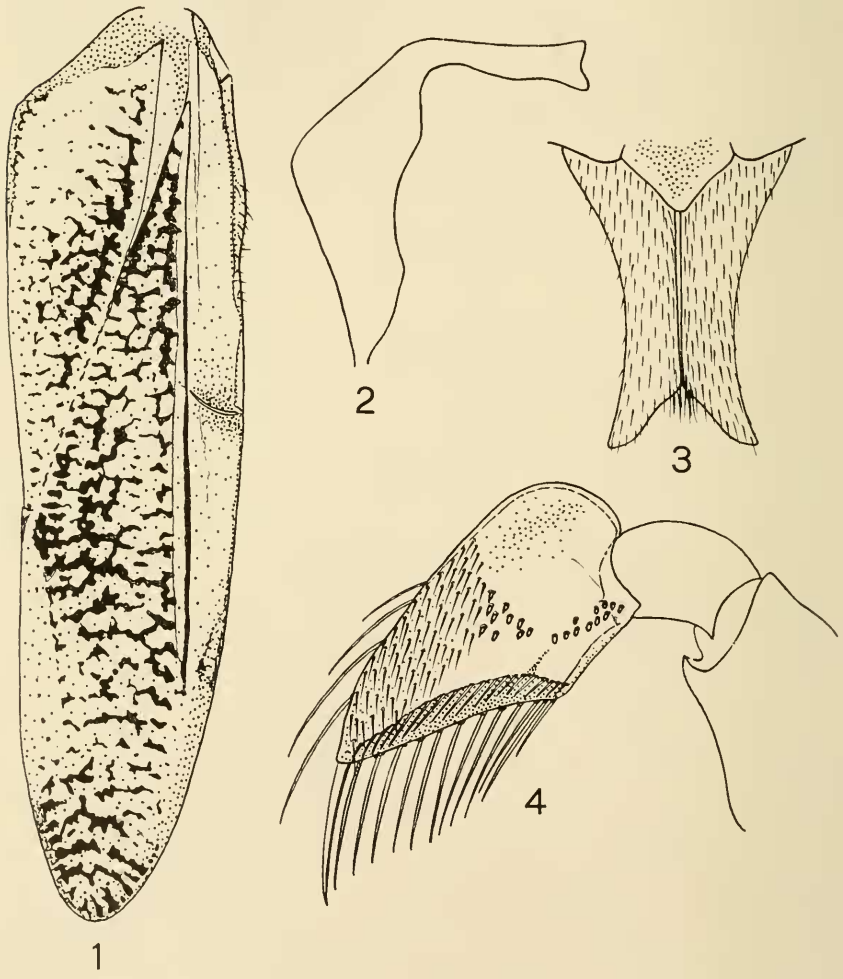
lobes; seventh tergite with pencil of long hairs and a small, curved, dextral, sclerotized hook; strigil small, with 5 combs; right clasper as illustrated.

The female is similar in color and general structure to the male; last ventral abdominal segment not plainly incised at the tip.

Comparative notes.—*P. janeae* is closely related to the genotype *P. gillettei* Abbott, differing from that species by the less depressed front of the male; the shorter, more obtuse metaxyphus; the narrower meso-epimeron; and the structure of the male pala. It is a noticeably smaller



Palmacorixa janeae n. sp. Fig. 1, right hemelytron, male; fig. 2, right genital clasper, male; fig. 3, metaxyphus; fig. 4, right pala, male.

species on the average than *gillettei*, with more pointed hemelytra, and the hemelytral pattern is made up of smaller and more scattered figures than average *gillettei* from the Prairie Region.

The Saskatchewan specimens are a little larger than the Manitoban and decidedly paler, with the lighter area of the clavus more conspicuous.

Habitat and distribution.—The type series was collected near the north shore line in clear, sandy-bottomed Lake Katepwa which is part of the Qu'Appelle River system. No conspicuous vegetation was present.

The Manitoban series was collected at Moon Lake in Riding Mountain National Park. This lake is in a spruce forest association and is much smaller than Katepwa. It is stony-bottomed, lacks conspicuous vegetation, and is not on a river course.

As the species lacks functional hind wings and presumably does not migrate as readily as other species, the distribution cannot be explained at present.

Holotype male, allotype female.—Lake Katepwa, Lebret, Saskatchewan, 13.vii.1958 (A. R. & J. E. Brooks) : No. 6777 in the Canadian National Collection, Ottawa.

Paratypes.—20 males, 46 females, Lebret, Sask., 13.vii.1958 (A. R. & J. E. Brooks) ; 9 males, 23 females, Moon Lake, Wasagaming, Manitoba, 14.viii.1958 (A. R. & J. E. Brooks). Paratypes in Ottawa, in the United States National Museum, Washington, and in the University of Kansas, Lawrence.

REFERENCE

Hungerford, H. B. 1948. The Corixidae of the Western Hemisphere (Hemiptera). Univ. Kansas Sci. Bull. 32: 1-827.

BOOK REVIEW

A REVIEW OF THE CRABHOLE MOSQUITOES OF THE GENUS DEINOCERITES (DIPTERA, CULICIDAE), by John N. Belkin and Charles L. Hogue, Univ. Calif. Publ. in Ent. 14: 411-458, illus. 1959.

The genus *Deinocerites* is distributed in the Caribbean area and along that part of the Pacific Coast of the Western Hemisphere opposite the Caribbean. It is one of the most interesting genera of mosquitoes because of its association with crabholes and its uncertain position in the Culicidae. This work is a splendid revision of the genus, dealing with 11 species, 6 of them previously described, 4 described as new, and 1 unnamed. The work was based on the study of more than 1,500 specimens. The paper summarizes the biological information and goes into the taxonomy, zoögeography and phylogeny in detail. The illustrations consist of a distribution map by species and species group, a phylogenetic tree, and many fine taxonomic drawings by the junior author. Complete keys are given to the females, males, and male terminalia, and preliminary keys to some of the larvae and pupae.

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